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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/536,366	03/27/2000	Christopher J. Edge	53492USA1A	3630

7590 07/06/2004	EXAMINER
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ART UNIT	PAPER NUMBER
2672	20

DATE MAILED: 07/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
Office Action Summary		09/536,366	EDGE ET AL.
		Examiner	Art Unit	
		Daniel J Chung	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 April 2004*.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
    closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *25-46* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *25-32 and 34-46* is/are rejected.
7)☒ Claim(s) *33* is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
        1.☐ Certified copies of the priority documents have been received.
        2.☐ Certified copies of the priority documents have been received in Application No. _____.
        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
            application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date *17*.
4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____ .

DETAILED ACTION

Claims 25-46 are presented for examination. This office action is in response to the amendment filed on 4-9-2004.

Information Disclosure Statement

Receipt is acknowledged of Applicant's Information Disclosure Statement of 12-29-03, which has been placed in the application file and considered by the Examiner.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 25,28,30-32,34-35,38,41 and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Swen et al (5,806,081).

Regarding claim 25, Swen et al discloses that the claimed feature of a system comprising: a source device profile interpreter ["color space conversion";

52 in "colorsync utilities"; 34] that interprets a source device profile [36] to convert

coordinates in a source device color space to a device independent color space

(See Fig 2, Fig 3, col 5 line 3-23, col 8 line 3-12); a destination device profile

interpreter [52] that interprets a destination device profile [38] to convert

coordinates in a destination device color space to the device independent color

space (See Fig 2, Fig 3, col 5 line 3-23, col 8 line 3-12); a color transformer

["colorsync utilities"; 34] that generates a color map ["CMM"] defining a

relationship ["matching"] between the source and destination device color spaces

based on the converted coordinates ["various independent and derived color

space"; col 8 line 3-12] and user preferences ["a control panel interface by which

users can set system profile"; col 2 line 20-21, col 11 line 20-21, col 11 line 36-

42] specified by a user independently of the source and destination device

profiles [36,38 in Fig 2]. (See Fig 2, Fig 3, col 2 line 20-31, col 6 line 37-54)

Regarding claim 28, Swen et al discloses that the color transformer

adjusts the source and destination device profile interpreters based on the user

preferences. (See col 2 line 20-21, col 11 line 20-21, col 11 line 36-42)

Regarding claim 30, Swen et al discloses that the source and destination

device profile interpreters are configured based on white and black point

parameters to account for color variations between media and colorants used by

different color display device. (See col 8 line 52-57)

Regarding claim 31, Swen et al discloses that the source and destination device profile interpreters are configured based on pleasing color corrections. (See Fig 2, Fig 3)

Regarding claim 32, Swen et al discloses that the color transformer generates the color map ["closest CMM"] in part by reducing color error between the converted coordinates from the source and destination device profile interpreters. (See Fig 7, Fig 9)

Regarding claim 34, Swen et al discloses that the source device profile [36] contains raw spectral data that characterizes a source device [26], and the destination device profile [38] contains raw spectral data that characterizes a destination device [30]. (See col 5 line 3-10)

Regarding claim 35, Swen et al discloses that each of the source and destination device profiles [36,38] defines a forward transformation [34,52] from one of the source and destination color spaces to the device independent color space. (See Fig 2, Fig 3, col 5 line 3-23, col 8 line 3-12)

Regarding claims 38, 41 and 44, claims 38, 41 and 44 are similar in scope to the claim 25, and thus the rejection to claim 25 hereinabove is also applicable to claims 38, 41 and 44.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described
> as set forth in section 102 of this title, if the differences between the subject matter sought to
> be patented and the prior art are such that the subject matter as a whole would have been
> obvious at the time the invention was made to a person having ordinary skill in the art to which
> said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

Claims 26-27,29-30,34,36-37 39-40,42-43 and 45-46 are rejected under

35 U.S.C. 103(a) as being unpatentable over Swen et al (5,806,081) and Ring

et al (5,754,184)

Regarding claims 26 and 27, Swen et al fails to teach that the user

preferences include illuminant functions/ observer functions. However, such

limitations are shown in the teaching of Ring et al. (See col 3 line 45-48, col 4 line

30-36, col 4 line 44-59, col 9 line 7-9, col 9 line 16-20, col 9 line 16-20) It would

have been obvious to one skilled in the art to include such illuminant/observer

functions into the teaching of Swen et al, in order to "provide a system that

preserves the visual appearance of colors from a variety of input media or color

specifications with differing viewing environments to a variety of output media or

color specifications with differing viewing environments" (See col 2 line 1-32 in

Ring), as such improvement is also advantageously desirable in the teaching of

Swen et al for optimizing color management system with different environments.

Regarding claim 29, Swen et al fails to teach that the source and destination profile interpreters are configured as removable plug-in modules for use by the color transformer. However, having removable plug-in modules [i.e. external device in computer systems] in similar system is well known in the art at the time of Applicant's invention, in order to reduce physical size of system. Therefore, it would have been obvious to one skilled in the art to include "a removable plug-in modules" into the teaching of Swen et al.

Regarding claims 36 and 37, refer to the discussion for the claim 26 and 27, Ring et al further discloses that the color map includes a look-up table/a mathematical expression. (See col 3 line 53-57, col 4 line 43-46, col 4 line 58-61, col 8 line 33-44)

Regarding claims 39-40,42-43 and 45-46, claims 39-40,42-43 and 45-46 are similar in scope to the claims 26-27, and thus the rejections to claims 26-27 hereinabove are also applicable to claims 39-40,42-43 and 45-46.

Claims 25-32 and 34-46 are once again rejected under 35 U.S.C. 102(e) as being anticipated by Ring et al (5,754,184).

Regarding claim 25, Ring et al discloses that the claimed feature of a

system (See Abstract, col 2 line 1-col 3 line 22) comprising: a source device

profile interpreter that interprets a source device profile to convert coordinates in

a source device color space to a device independent color space (See Abstract

line 4-6, Fig 2, col 2 line 33-36, col 5 line 36-col 6 line 9); a destination device

profile interpreter that interprets a destination device profile to convert

coordinates in a destination device color space to the device independent color

space (See Fig 4, col 8 line 55-67); a color transformer that generates a color

map defining a relationship between the source and destination device color

spaces based on the converted coordinates and user preferences specified by a

user independently of the source and destination device profiles. (See col 2 line

46-49, col 4 line 40-49, col 8 line 45-50, Fig 3, col 6 line 14+, col 9 line 16-20)

Regarding claims 26 and 27, Ring et al discloses that the user

preferences include illuminant functions/ observer functions. (See col 3 line 45-

48, col 4 line 30-36, col 4 line 44-59, col 9 line 7-9, col 9 line 16-20, col 9 line 16-

20)

Regarding claim 28, Ring et al discloses that the color transformer adjusts

the source and destination device profile interpreters based on the user

preferences. (See col 2 line 46-49, col 4 line 40-49, col 8 line 45-50, Fig 3, col 6

line 14+, col 9 line 16-20)

Regarding claim 29, Ring et al fails to teach that the source and destination profile interpreters are configured as removable plug-in modules for use by the color transformer. However, having removable plug-in modules [i.e. external device in computer systems] in similar system is well known in the art at the time of Applicant's invention, in order to reduce physical size of system. Therefore, it would have been obvious to one skilled in the art to include "a removable plug-in modules" into the teaching of Ring et al.

Regarding claim 30, Ring et al discloses that the source and destination device profile interpreters are configured based on white and black point parameters to account for color variations between media and colorants used by different color display device. (See col 2 line 1-18)

Regarding claim 31, Ring et al discloses that the source and destination device profile interpreters are configured based on pleasing color corrections. (See col 2 line 46-49, col 4 line 40-49, col 8 line 45-50, Fig 3, col 6 line 14+, col 9 line 16-20)

Regarding claim 32, Ring et al discloses that the color transformer generates the color map in part by reducing color error between the converted coordinates from the source and destination device profile interpreters. (See col 2 line 46-49, col 4 line 40-49, col 8 line 45-50, Fig 3, col 6 line 14+, col 9 line 16-20)

Regarding claim 34, Ring et al discloses that the source device profile [36] contains raw spectral data that characterizes a source device [26], and the destination device profile [38] contains raw spectral data that characterizes a destination device [30]. (See col 5 line 3-10)

Regarding claim 35, Ring et al discloses that each of the source and destination device profiles defines a forward transformation from one of the source and destination color spaces to the device independent color space. (See Abstract line 4-6, Fig 2, col 2 line 33-36, col 5 line 36-col 6 line 9, col 8 line 55-67)

Regarding claims 36 and 37, Ring et al further discloses that the color map includes a look-up table/a mathematical expression. (See col 3 line 53-57, col 4 line 43-46, col 4 line 58-61, col 8 line 33-44)

Regarding claims 38, 41 and 44, claims 38, 41 and 44 are similar in scope to the claim 25, and thus the rejection to claim 25 hereinabove is also applicable to claims 38, 41 and 44.

Regarding claims 39-40,42-43 and 45-46, claims 39-40,42-43 and 45-46 are similar in scope to the claims 26-27, and thus the rejections to claims 26-27 hereinabove are also applicable to claims 39-40,42-43 and 45-46.

Allowable Subject Matter

Claim 33 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 25-46 have been considered but are moot in view of the new ground(s) of rejection. In response to the applicant's argument that the cited references do not discloses generating a color map based on user preferences and converted coordinates by source and destination device profiles, Swen et al clearly discloses that generating a color map ["CMM"] defining a relationship between the source and destination device color spaces based on the converted coordinates ["various independent and derived color space"; col 8 line 3-12] and user preferences ["a control panel interface by which users can set system profile"; col 2 line 20-21, col 11 line 20-21, col 11 line 36-42] specified by a user independently of the source and destination device profiles [36,38 in Fig 2]. (See Fig 2, Fig 3, col 2 line 20-31, col 6 line 37-54). Also, such features are shown in the newly submitted Ring reference. (See col 2 line 46-49, col 4 line 40-49, col 8 line 45-50, Fig 3, col 6 line 14+, col 9 line 16-20)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Chung whose telephone number is (703) 306-3419. He can normally be reached Monday-Thursday and alternate Fridays from 7:30am- 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael, Razavi, can be reached at (703) 305-4713.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306 (Central fax)

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

djc

Art Unit: 2672

June 18, 2004

MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600